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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WILLOUGHBY, TERRENCE Ronique

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/596,832	<b>Applicant(s)</b> CREVENAT ET AL.	
	<b>Examiner</b> TERRENCE R. WILLOUGHBY	<b>Art Unit</b> 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 13 and 14 is/are rejected.
- 7) ☒ Claim(s) 6-12 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/11/06;11/29/06</u>   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. FR 0315551, filed on December 30, 2003.

### ***Oath/Declaration***

2. The full name (s) of each inventor (family name and at least one given name together with any initial or signature) has not been set forth.

### ***Drawings***

3. The drawings are objected to because the unlabeled boxes (i.e. 2, 3 and 4 in ,Fig. 1) need to have some type of descriptive text. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement

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sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

4. Claims 6-8, 10 and 15 recites the limitation "wherein **the primary circuits of the transformers**" in each of the claims. There is insufficient antecedent basis for this limitation in the claim.
5. Claims 3, 5, 13 and 14 recites "secondary circuit of a transformer" in which the examiner believes should be changed to recite "secondary winding of a transformer".
6. Claims 6,7, 8 and 15 recites "primary circuit of the transformer" in which the examiner believes should be changed to recite "primary winding of the transformer".

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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8. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Veraldi (US 4,280,098).

9. Regarding claim 1, Veraldi in (Fig. 5) discloses a surge protector device of the spark gap lightning arrestor kind, the device comprising:

First spark gap (53);

First pre-trigger system (51) electrically connected to the first spark gap (53) in such a manner as to enable an arc to be struck therein; and

Control device (94) electrically connected to the first pre-trigger system (51) in such a manner as to activate it;

The protector device includes at least one second spark gap (55) wherein connected in parallel with the first spark gap (53), and electrically connected to a second pre-trigger system (54) connected in parallel with the first pre-trigger system (51), in such a manner that the control device (94) activates the first (51) and second (54) pre-trigger system simultaneously so as to trigger the first (53) and second (55) spark gaps simultaneously (col. 6, ll. 64 thru col. 7, ll. 1-31 and ll. 34-38).

10. Regarding claim 2, Veraldi in (Fig. 5), discloses the device of claim 1, wherein each pre-trigger system (51, 54) is formed by a trigger electrode (col. 6, ll. 3-7).

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 3-5 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Veraldi (US 4,280,098) in view of Danowsky et al. (US 6,111,740).

13. Regarding claims 3-5, Veraldi discloses the device of claims 1 and 2, except for wherein each pre-trigger system is formed by a system comprising a trigger electrode together with a secondary winding of a transformer.

However, Danowsky et al. in (Fig. 2), discloses wherein a pre-trigger system is formed by a system comprising a trigger electrode (8) together with a secondary winding (6) of a transformer (14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the pre-triggering teachings of Danowsky using a transformer to trigger a spark gap in the three independently triggerable spark gaps device as taught by Veraldi, in order to provide an alternative way to trigger spark gaps which may not require any separate energy supply and thereby reduces the cost of the device.

Veraldi in view of Danowsky et al. does not specifically disclose wherein each of the pre-trigger system comprises a trigger electrode together with a secondary winding of a transformer.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form each pre-triggering system with a trigger electrode together with a second winding of a transformer, because it is desirable to trigger all three spark gaps simultaneously and since it has been held that mere duplication of the

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essential working parts of a device involves routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

14. Regarding claims 13, Veraldi in view of Danowsky et al. discloses all the limitations recited above in claims 3-5.

15. Regarding claims 14, Veraldi in view of Danowsky et al. discloses all the limitations recited above in claims 3-5.

***Allowable Subject Matter***

16. Claims 6 and 15 would be allowable if rewritten to overcome the objection as set forth in this Office action and to include all of the limitations of the base claims 4 or 5 and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Combined claims 6 or 15 would be allowable over the prior art of record because the prior art failed to teach or suggest wherein the primary circuits of the transformers corresponding respectively to the first and second pre-trigger systems are connected in parallel as set forth in the claimed invention.

17. Claim 7 would be allowable if rewritten to overcome the objection as set forth in this Office action and to include all of the limitations of the base claim 4 and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Combined claim 7 would be allowable over the prior art of record because the prior art failed to teach or suggest wherein the primary circuits of the transformers are

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electrically connected to the outputs of the control device as set forth in the claimed invention.

18. Claim 8 would be allowable if rewritten to overcome the objection as set forth in this Office action and to include all of the limitations of the base claim 3 and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Combined claim 8 would be allowable over the prior art of record because the prior art failed to teach or suggest wherein the primary circuits of each transformers is electrically connected a capacitor that is charged under the control of the control device as set forth in the claimed invention.

19. Claim 9 would be allowable if rewritten to overcome the objection as set forth in this Office action and to include all of the limitations of the base claim 8 and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Combined claim 9 would be allowable over the prior art of record because the prior art failed to teach or suggest wherein the device further comprising a third spark gap connected in parallel with the capacitor such that when the voltage across the terminals of the capacitor reaches the trigger threshold value for said third spark gap, the capacitor is short-circuited, which then discharges through the primary circuit of the transformer as set forth in the claimed invention.



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21. Claim 10 would be allowable if rewritten to overcome the objection as set forth in this Office action and to include all of the limitations of the base claim 9 and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Combined claim 10 would be allowable over the prior art of record because the prior art failed to teach or suggest wherein the device further comprising first and second capacitors connected in parallel with the third spark gap, and each electrically connected to the primary circuit of an associated transformer as set forth in the claimed invention.

22. Claim 11 is objected to as being dependent upon a rejected base claim 1, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Combined claim 11 would be allowable over the prior art of record because the prior art failed to teach or suggest wherein the control device is sensitive to voltage as set forth in the claimed invention.

23. Claim 12 is objected to as being dependent upon a rejected base claim 11, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Combined claim 12 would be allowable over the prior art of record because the

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prior art failed to teach or suggest wherein the control device comprises fuses, varistors, and spark gaps as set forth in the claimed invention.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TERRENCE R. WILLOUGHBY whose telephone number is (571)272-2725. The examiner can normally be reached on 9-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jared Fureman can be reached on 571-272-2391. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Terrence R Willoughby/  
Examiner, Art Unit 2836  
10/1/09

/Stephen W Jackson/  
Primary Examiner, Art Unit 2836